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Testimony on
Kansas Department of Health and Environment State Water Plan Funding
House Vision 2020 Committee
Presented by Mike Tate, PE

February 25, 2015

Good morning Chairman Sloan and members of the committee, thank you for the opportunity to speak to you today on State Water Plan Funding. I am Mike Tate, Director of the Bureau of Water, Kansas Department of Health and Environment (KDHE).

I realize the Kansas Water Office and Kansas Water Authority have already briefed you from a global perspective of State Water Plan Funding. Therefore, I will focus on the three issues posed by the Committee:

- The agency's priorities for the state with regard to the Water Plan Fund;
- The timelines for the desired action; and
- Options for funding the Water Plan.

Priorities and Timelines

The Agency receives funding targeted to four different areas: Contamination Remediation, Total Maximum Daily Load (TMDL) Initiatives, Nonpoint Source Pollution, and Watershed Restoration and Protection Strategy. As the previous presentation from the Kansas Water Office identified, that funding has been up and down over the years but on a general downward trend (graph is included on Page 4). I will briefly address the first two issues posed for each of those areas and conclude with overall response to funding options.

1. **Contamination Remediation** – These funds are used for three purposes: 1) operation and maintenance costs of Superfund remediation projects; 2) 10% state match requirement for remedial actions at Superfund projects; and 3) investigation and remediation costs for orphaned contaminated sites under KDHE management. An example of a Superfund site is the Ace Chrome Plating site in Colby where EPA installed a treatment system for chromium contaminated groundwater that is pumped, treated and placed into the Colby public water supply for reuse. KDHE is now responsible for the operation and maintenance of the groundwater treatment system. The estimated cost for the operation and maintenance of the system is $400,000 per year.

   a. Priorities – Continue to cover the costs for ongoing Superfund work as well as investigation and remediation of orphaned sites under the supervision of KDHE. There are 82 orphaned sites and 6 active superfund sites that will require assessment, monitoring, remediation, state match and long-term operation and maintenance activities.

   b. Timelines – Most Superfund cleanups are measured in terms of decades as opposed to days, months or years.

2. **TMDL Initiatives** – These funds are used to support efforts to identify and rectify watersheds that are impaired by pollutants, thus limiting the designated uses of their lakes and streams. Identification is based on collecting and analyzing stream, biology and lake water samples, comparing the results to

established water quality criteria, and making a determination of the level of use support. For watersheds deemed impaired, a rectifying TMDL is written specifying quantitative reductions needed from both point sources (permitted wastewater dischargers) and nonpoint sources (runoff). The analyses from the TMDL Program are used by KDHE's point and nonpoint source programs and the Division of Conservation (DOC) at the Kansas Department of Agriculture to target needed actions in impaired watersheds.

a. Priorities – Focus efforts on nutrient pollution. The Agency executives for KDHE, the Water Office, Kansas Department of Agriculture, and the Kansas Department of Wildlife, Parks, and Tourism jointly produced a Nutrient Reduction Framework in 2012 declaring the four agencies' intent to significantly reduce nutrient pollution in Kansas waters. Funding through the TMDL Initiatives has already allowed for the identification of 16 priority watersheds for nutrient reduction in Central and Eastern Kansas, and additional biological monitoring assessing improvements to water quality through nutrient reduction efforts. Those efforts will need to be continued into the future

b. Timelines – Watershed Restoration and Protection Strategy (WRAPS) plans (discussed later) have identified targeted areas for installation of nonpoint source best management practices. These practices are generally installed using cost share programs between producers, WRAPS, DOC, and the US Department of Agriculture. Based on current funding levels of those cost share programs, remediation of most watersheds are estimated to take 20-40 years. Assessments of impairment occur every two years and the number of impaired waters needing TMDLs in Kansas is currently 483. Between 12 and 20 TMDLs are completed annually.

3. **Nonpoint Source** – These funds are used to match Federal Clean Water Act §319 funds. Federal grants provided under Section 319 cover up to 60 percent of the total cost of the program; states are responsible for providing the remaining 40 percent of the program cost. Section 319 funds "*programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner.*" Section 319 funds are broken into two categories – base grant (~$1.0M) and incremental grant (~1.8M). KDHE uses less than 50% of the base grant funds for program administration, with the remainder used to implement local WRAPS activities (discussed later). The entire incremental grant is used for local WRAPS implementation activities.

a. Priorities – Focus efforts on nutrient and sediment pollution. As stated above, the executives for KDHE, the Water Office, Kansas Department of Agriculture, and the Kansas Department of Wildlife, Parks, and Tourism jointly produced a Nutrient Reduction Framework in 2012 declaring the four agencies' intent to significantly reduce nutrient pollution in Kansas Waters. The Governor's 50 Year Vision for Water Supply also embraces the need for nutrient reduction and sediment reduction in water supply lakes and reservoirs. The majority of nonpoint source projects are aimed at nutrient and/or sediment reductions.

b. Timelines – Watershed Restoration and Protection Strategy (WRAPS) plans (discussed later) have identified targeted areas for installation of nonpoint source best management practices. These practices are generally installed using cost share programs between producers, WRAPS, DOC, and the US Department of Agriculture. Based on current funding levels of those cost share programs, remediation of most watersheds will take 20-40 years.

4. **Watershed Restoration and Protection Strategy** – These funds are used to support locally-led Watershed Restoration and Protection Strategy (WRAPS) groups. WRAPS is a planning and management framework intended to engage stakeholders in a process to identify watershed restoration and protection needs, establish management goals, create a cost effective action plan to achieve goals and implement the action plan. As indicated above, the majority of WRAPS work supports statewide goals of sediment and nutrient reduction in Kansas waters. The SWP funds are combined with Federal funds to support this effort. The vast majority of the funds are used for local implementation of best management practices through the locally-led WRAPS groups.

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    b. Timelines – WRAPS plans have identified targeted areas for installation of nonpoint source best management practices. These practices are generally installed using cost share programs between producers, WRAPS, DOC, and the US Department of Agriculture. Based on current funding levels of those cost share programs, remediation of most watersheds will take 20-40 years.

Possible Funding Options

Recognizing the original State Water Plan Fund concept of an approximate 50/50 mix of state funds and user fees is not currently being met, any discussion of funding options would need to begin with the likelihood of restoring the balance of funds. It appears unlikely state general funds or the Economic Development Initiatives Fund (EDIF) are near-term funding options. Therefore, it would take legislative action to establish policy direction for the desired size of the fund, the sources of fees directed to the fund, and the relative contribution from each of those sources.

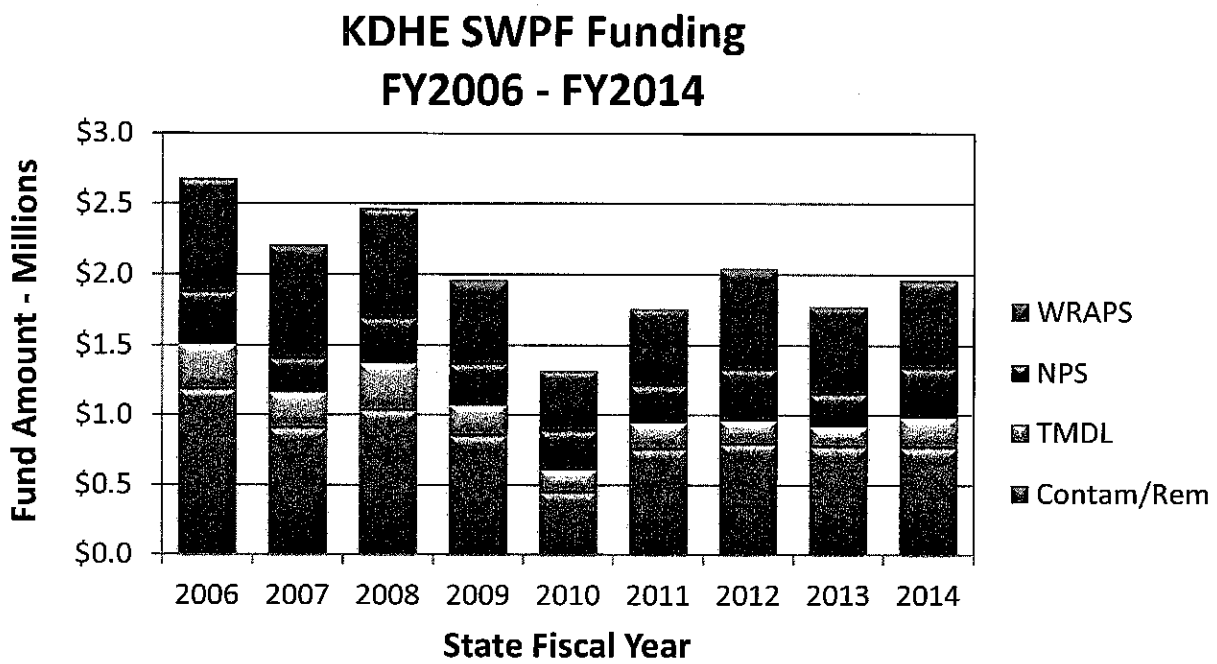
Based on the assumption no state funding will be provided, the following conceptual ideas on where fees could focus are provided as discussion topics for the Committee. To be clear, these ideas are not being promoted by KDHE. They are only to be responsive to the Committee's directive to look at funding options and would need to be statutorily enacted. Those fees that directly impact KDHE or KDHE permittees include:

1. WRAPs and Nonpoint Source. As discussed above, the primary focus of KDHE's efforts in terms of water quality improvement is the reduction in nutrients and sediment. The primary sources of nutrients are wastewater treatment discharges, row crop agriculture, and livestock production. Therefore, if the concept is for those entities impacting water resources to support the SWPF through fees, those would be the focus in terms of nutrient pollution.

2. Contamination Remediation. KDHE introduced HB2192 this Legislative session in order to relieve funding limitations at superfund and other orphan sites under KDHE management. KDHE views the funding initiative in HB2192 as an enhancement to the current level of funding and should not be viewed as replacing the state water plan funding needed to remediate these sites.

3. Municipal Water Use. Municipal water use is already supplying a sizeable portion of the SWPF from volumetric-based fees and proposals have been made to increase those fees. An incentive could be provided to those systems at or below their regional per capita water use which would demonstrate conservation and/or efficient use of water supply.

Thank you for the time afforded today. I would be happy to stand for questions at the appropriate time.



Federal Water Requirements Impact on Small Communities

February 25, 2015

Mike Tate, PE
Kansas Department of Health and Environment

Overview

- The Kansas Landscape
- Arsenic
- Uranium
- Nitrate
- Buy American
- Davis-Bacon – Prevailing Wage

Our Mission: To protect and improve the health and environment of all Kansans

The Kansas Landscape

- 1011 public water supply systems

Source	Number	Population Served
Surface Water	78	1,556,205
Surface Water Purchased	289	386,299
Total Surface Water	367	1,942,504
Groundwater	558	725,199
Groundwater Purchased	86	43,846
Total Groundwater	644	769,045
Grand Total	**1,011**	**2,711,549**

The Kansas Landscape

- Median population served = 400
- 95% of Kansans receive water from a public water supply (PWS)
  - 5% have private sources
- 96% of PWS users receive water that meets all Maximum Contaminant Levels (MCLs)
- 88% of PWS had no violations of MCLs
  - 12% of systems w/violations = 4% of users
    - Tells us most problems in small systems

Arsenic

- Causes cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate
- Six KS systems serving 2967 persons in violation
  - Average = 495 population
    - 495 population ≈ 200 connections or ratepayers
- MCL was dropped from 0.05 to 0.01 mg/L – 2001
  - Systems were compliant until that time
- Can treat with centralized treatment or in-home treatment
  - In-home treatment has strings
    - System must own, service regularly, have fail safe features,etc.

Uranium

- Causes cancer and has toxic kidney effects
- Five KS systems serving 5031 persons in violation
  - Average = 1006 population
    - 1006 population ≈ 400 connections or ratepayers
- MCL was first set in 2000
- Can treat with centralized treatment only
  - No in-home treatment available
  - Must deal with the waste removed
    - Lakin disposal well cost ≈ $2M

Nitrate

- Blue-baby syndrome, limits oxygen carrying capacity of hemoglobin in certain adults and pregnant women
- 15 KS systems serving 8089 persons in violation
  - Average = 540 population
    - 540 population ≈ 215 connections or ratepayers
- MCL in effect since 1992
- Can treat with centralized treatment or in home units
  - Primary source of contamination is agriculture

Example of Costs - Arsenic

- Englewood, KS
  - Population = 90
    - Residences ~40
  - Arsenic exceeds MCL of 0.010 mg/L
    - Prior to 2006, MCL = 0.050 mg/L
  - Only *affordable* treatment
    - Point of use
      - Reverse osmosis unit under sink of each home
      - City must ensure routine maintenance of each unit
      - ~$1,500 per residence

Example of Costs - Uranium

- Lakin, KS
  - Population = 2,550
    - Residences ~1020
  - Uranium exceeds MCL
  - Treatment cost
    - $6.6 million
      - $2,588 per person
      - $6,470 per residence
    - Approximately 1/3 of project receive Rural Devel. grant

Example of Costs - Nitrate

St. John, KS

- Population = 1,275
  - Residences ~510
- Nitrate exceeds MCL
- Treatment cost
  - $3 million
    - $2,400 per person
    - $5.800 per residence

Congressional Mandates

- For low interest loans through the State Revolving Fund (SRF) Loan Program, Congress required
  - Buy American provisions
  - Compliance with the Davis-Bacon Act
- Buy American Provisions – iron and steel
  - Applies to certain products composed "primarily" (meaning 50 percent by cost) of iron or steel
  - Products "produced in the US" requires all manufacturing processes must have taken place in the United States. All manufacturing processes include melting, refining, forming, rolling, drawing, finishing, fabricating and coating
  - Some argue the provision raises cost

Congressional Mandates

- Davis-Bacon Act – prevailing wage
  - The Davis-Bacon Act is an 80-year-old wage law administered by the US Dept of Labor that mandates "prevailing" wages for employees of contractors and subcontractors performing work on federally financed construction projects
  - Some argue that applying wage rates from large metro areas to rural portions of KS raise project costs

Summary

- Federal laws and rules do have an impact on drinking water rates in small communities
- Most rules for MCLs are health-based
- Other impacts come through policies set by Congress in law

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